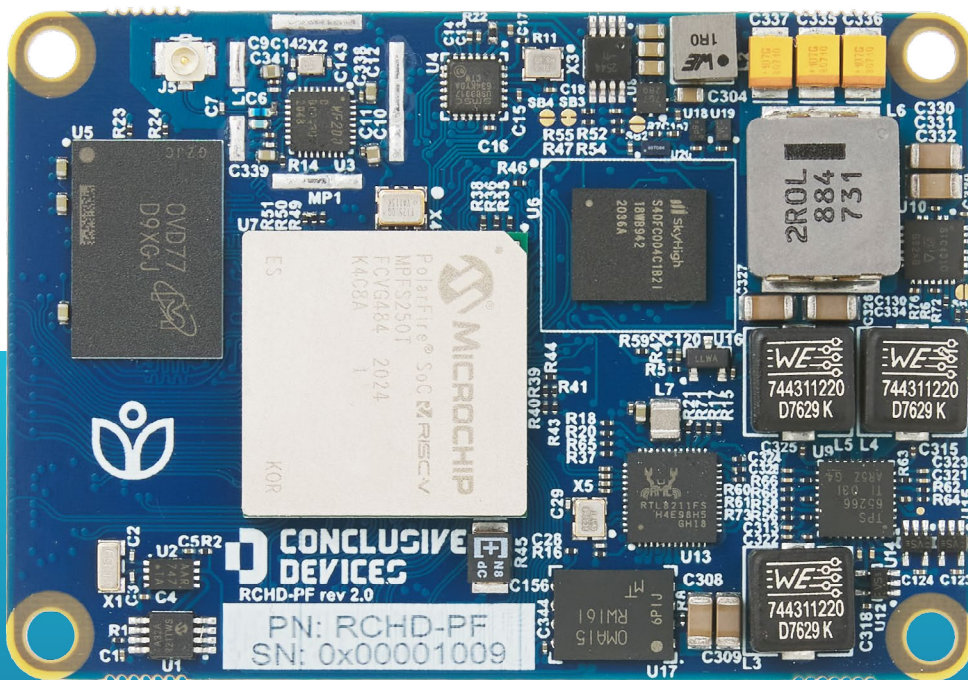


# RCHD-PF

## Polarfire System on Module



### RCHD-PF

- 667 MHz RISC-V, 5 cores
- Microchip PolarFire® FPGA: 23K - 254K Logic Elements
- RISC-V and FPGA integrated on a Single Chip
- High-Speed I/O and 12.7 Gbit/s transceivers
- Real-Time Signal Processing with Hardware Offloading

# RCHD-PF

## Polarfire System on Module



visit product website

### RCHD-PF Specifications

<b>SoC</b>	Microchip PolarFire® FPGA SoC
<b>CPU Architecture</b>	RISC-V, up to 667 MHz, 5 cores 4x RV64GC application cores 1x RV64IMAC monitor/boot core Performance: 3.125 CoreMarks/MHz, 1.714 DMIPS/MHz
<b>FPGA</b>	Microchip PolarFire® SoC: - MPFS025T - 23k logic elements - MPFS095T - 93k logic elements - MPFS160T - 161k logic elements - MPFS250T - 254k logic elements
<b>Memory</b>	LPDDR4 (512 MB, 1, 2 or 4 GB) 1600 MT/s
<b>Mass storage</b>	eMMC 5.0 (4-64 GB) 4 KB EEPROM NOR Flash memory (32 MB) for FPGA configuration
<b>Ethernet</b>	1x 1 Gbit/s Ethernet PHY 1x 1 Gbit/s Ethernet MAC (SGMII interface)
<b>PCIe</b>	PCIe 2.0 up to x4
<b>USB</b>	1x USB 2.0 OTG
<b>Debug</b>	Conclusive Developer Cable connector providing access to: - System UART - JTAG port - System I2C bus
<b>Software support</b>	Linux 6.5 & 6.1, U-Boot, Yocto, Buildroot, Ubuntu, FreeBSD (on request)
<b>Additional features</b>	802.11 b/g/n WiFi with u.fl antenna connector (optional) RTC with external battery back-up 30 high speed differential GPIO / 60 high speed single ended GPIO 32 differential GPIO / 64 single ended GPIO 4 XCVR bidirectional lanes (12.7 Gbit/s)
<b>Operating Temperature</b>	-40 °C to 85 °C
<b>Power supply</b>	3.3 V
<b>Dimensions</b>	65 x 45 mm

### About Conclusive Engineering

We provide reliable development and consulting services for various embedded platforms, assisting enterprises and manufacturing companies in optimizing their processes through tailored embedded system services, products, and hardware solutions.

For more information contact:  
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